We claim:

1. A substantially purified nucleic acid sample comprising one or more nucleic acids having sequences selected from the group consisting of:
5'- GCGGTCCCAAAAGGGTCAGTTGTAGGAAGTCACCAAAG -3' (SEQ ID NO: 3), 5'-GCGGTCCCAAAAGGGTCAGTCGATACAGAATATATGTGCC -3' (SEQ ID NO: 4), 5'-GCGGTCCCAAAAGGGTCAGTGAATCATTCAGTGGGTATAAGCAG -3' (SEQ ID NO: 5), 5'- GCGGTCCCAAAAGGGTCAGTCTTCAATGCACCTCCTCCC -3' (SEQ ID NO: 6), 5'-GCGGTCCCAAAAGGGTCAGTAGATACTTCAATAGCTCAGCC -3' (SEQ ID NO: 7), 5'-GCGGTCCCAAAAGGGTCAGTGGTACATTACCTGTATTTTGTTT -3' (SEQ ID NO: 8), 5'-GCGGTCCCAAAAGGGTCAGTGTGAATCGATGTGGTGACCA -3' (SEQ ID NO: 9), 5'-GCGGTCCCAAAAGGGTCAGTCTGGTTTAGCATGAGGCGGT -3' (SEQ ID NO: 10), 5'-GCGGTCCCAAAAGGGTCAGTTTGGTTGTGCTGTGGCTCCT -3' (SEQ ID NO: 11), 5'-GCGGTCCCAAAAGGGTCAGTACAATACATACAAACATAGTGG -3' (SEQ ID NO: 12), 5'- GCGGTCCCAAAAGGGTCAGTGAAAGTATTTATTTTTTCTGGAAC -3' (SEQ ID NO: 13), 5'- GCGGTCCCAAAAGGGTCAGTGTGTGTAGAATGATGTCAGCTAT -3' (SEQ ID NO: 14), 5'- GCGGTCCCAAAAGGGTCAGTCAGATTGAGCATACTAAAAGTG -3' (SEQ ID NO: 15), 5'- GCGGTCCCAAAAGGGTCAGTTACATGAATGACATTTACAGCA -3' (SEQ ID NO: 16), 5'- GCGGTCCCAAAAGGGTCAGTAAGAACTGGATCAGGGAAGA -3' (SEQ ID NO: 17), 5'- GCGGTCCCAAAAGGGTCAGTTCCTTTTGCTCACCTGTGGT -3' (SEQ ID NO: 18), 5'- GCGGTCCCAAAAGGGTCAGTGGTCCCACTTTTTATTCTTTTGC -3' (SEQ ID NO: 19), 5'- GCGGTCCCAAAAGGGTCAGTTGGTTTCTTAGTGTTTGGAGTTG -3' (SEQ ID NO: 20), 5'- GCGGTCCCAAAAGGGTCAGTTGGATCATGGGCCATGTGC -3' (SEQ ID NO: 21), 5'- GCGGTCCCAAAAGGGTCAGTACTACCTTGCCTGCTCCAGTGG -3' (SEQ ID NO: 22), 5'- GCGGTCCCAAAAGGGTCAGTAGGTAGCAGCTATTTTTATGG -3' (SEQ ID NO: 23), 5'- GCGGTCCCAAAAGGGTCAGTTAAGGGAGTCTTTTGCACAA -3' (SEQ ID NO: 24), 5'- GCGGTCCCAAAAGGGTCAGTGCAATTTTGGATGACCTTC -3' (SEQ ID NO: 25), 5'- GCGGTCCCAAAAGGGTCAGTTAGACAGGACTTCAACCCTC -3' (SEQ ID NO: 26), 5'- GCGGTCCCAAAAGGGTCAGTGGTGATTATGGGAGAACTGG -3' (SEQ ID NO: 27), 5'- GCGGTCCCAAAAGGGTCAGTATGCTTTGATGACGCTTC -3' (SEQ ID NO: 28), 5'- GCGGTCCCAAAAGGGTCAGTTTCATTGAAAAGCCCGAC -3' (SEQ ID

NO: 29), 5'- GCGGTCCCAAAAGGGTCAGTCACCTTCTGTGTATTTTGCTG -3' (SEQ ID NO: 30), 5'- GCGGTCCCAAAAGGGTCAGTAAGTATTGGACAACTTGTTAGTCTC -3' (SEQ ID NO: 31), 5'- GCGGTCCCAAAAGGGTCAGTCGCCTTTCCAGTTGTATAATTT -3' (SEQ ID NO: 32),

or a complementary nucleic acid sequence thereof.

2. The substantially purified nucleic acid of claim 1 wherein said composition is labeled with a detectable label.

3. The substantially purified nucleic acid of claim 1 wherein said detectable label is biotin.

4. A method of amplifying a nucleic acid sequence, comprising,

contacting a nucleic acid containing sample with reagents suitable for nucleic acid amplification including one or more pairs of primers flanking one or more predetermined nucleic acid sequences that are correlated with cystic fibrosis, and

amplifying said one or more predetermined nucleic acid sequences, if present, wherein said primers are one or more pairs of nucleic acids selected from the group consisting of: 5'- GCGGTCCCAAAAGGGTCAGTTGTAGGAAGTCACCAAAG -3' (SEQ ID NO: 3), 5'- GCGGTCCCAAAAGGGTCAGTCGATACAGAATATATGTGCC -3' (SEQ ID NO: 4), 5'- GCGGTCCCAAAAGGGTCAGTGAATCATTCAGTGGGTATAAGCAG -3' (SEQ ID NO: 5), 5'- GCGGTCCCAAAAGGGTCAGTCTTCAATGCACCTCCTCCC -3' (SEQ ID NO: 6), 5'- GCGGTCCCAAAAGGGTCAGTAGATACTTCAATAGCTCAGCC -3' (SEQ ID NO: 7), 5'- GCGGTCCCAAAAGGGTCAGTGGTACATTACCTGTATTTTGTTT -3' (SEQ ID NO: 8), 5'- GCGGTCCCAAAAGGGTCAGTGTGAATCGATGTGGTGACCA -3' (SEQ ID NO: 9), 5'- GCGGTCCCAAAAGGGTCAGTCTGGTTTAGCATGAGGCGGT -3' (SEQ ID NO: 10), 5'- GCGGTCCCAAAAGGGTCAGTTTGGTTGTGCTGTGGCTCCT -3' (SEQ ID NO: 11), 5'- GCGGTCCCAAAAGGGTCAGTACAATACATACAAACATAGTGG -3' (SEQ ID NO: 12), 5'- GCGGTCCCAAAAGGGTCAGTGAAAGTATTTATTTTTTCTGGAAC -3' (SEQ ID NO: 13), 5'- GCGGTCCCAAAAGGGTCAGTGTGTGTAGAATGATGTCAGCTAT -3' (SEQ ID NO: 14), 5'- GCGGTCCCAAAAGGGTCAGTCAGATTGAGCATACTAAAAGTG -3' (SEQ

ID NO: 15), 5'- GCGGTCCCAAAAGGGTCAGTTACATGAATGACATTTACAGCA -3' (SEQ ID NO: 16), 5'- GCGGTCCCAAAAGGGTCAGTAAGAACTGGATCAGGGAAGA -3' (SEQ ID NO: 17), 5'- GCGGTCCCAAAAGGGTCAGTTCCTTTTGCTCACCTGTGGT -3' (SEQ ID NO: 18), 5'- GCGGTCCCAAAAGGGTCAGTGGTCCCACTTTTTATTCTTTTGC -3' (SEQ ID NO: 19), 5'- GCGGTCCCAAAAGGGTCAGTTGGTTTCTTAGTGTTTGGAGTTG -3' (SEQ ID NO: 20), 5'- GCGGTCCCAAAAGGGTCAGTTGGATCATGGGCCATGTGC -3' (SEQ ID NO: 21), 5'- GCGGTCCCAAAAGGGTCAGTACTACCTTGCCTGCTCCAGTGG -3' (SEQ ID NO: 22), 5'- GCGGTCCCAAAAGGGTCAGTAGGTAGCAGCTATTTTTATGG -3' (SEQ ID NO: 23), 5'- GCGGTCCCAAAAGGGTCAGTTAAGGGAGTCTTTTGCACAA -3' (SEQ ID NO: 24), 5'- GCGGTCCCAAAAGGGTCAGTGCAATTTTGGATGACCTTC -3' (SEQ ID NO: 25), 5'- GCGGTCCCAAAAGGGTCAGTTAGACAGGACTTCAACCCTC -3' (SEQ ID NO: 26), 5'- GCGGTCCCAAAAGGGTCAGTGGTGATTATGGGAGAACTGG -3' (SEQ ID NO: 27), 5'- GCGGTCCCAAAAGGGTCAGTATGCTTTGATGACGCTTC -3' (SEQ ID NO: 28), 5'- GCGGTCCCAAAAGGGTCAGTTTCATTGAAAAGCCCGAC -3' (SEQ ID NO: 29), 5'- GCGGTCCCAAAAGGGTCAGTCACCTTCTGTGTATTTTGCTG -3' (SEQ ID NO: 30), 5'- GCGGTCCCAAAAGGGTCAGTAAGTATTGGACAACTTGTTAGTCTC -3' (SEQ ID NO: 31), 5'- GCGGTCCCAAAAGGGTCAGTCGCCTTTCCAGTTGTATAATTT -3' (SEQ ID NO: 32).

5. The method of claim 4, wherein said one or more pairs of nucleic acid primers is five pairs of nucleic acid primers.

6. The method of claim 4, wherein said one or more pairs of nucleic acid primers is ten pairs of nucleic acid primers.

7. The method of claim 4, wherein said one or more pairs of nucleic acid primers is fifteen pairs of nucleic acid primers.

8. The method of claim 7, wherein said primer sets are added in the following ratios determined as the moles of primers for exon 12 and 21 (SEQ ID NO: 9, 10, 13 and 14) to the moles of each other primer sets, the ratio being about 2 for exons 4 and i19 (SEQ ID NOs; 3-6), about 3.2 for exons 19, 7, 11 and i5 (SEQ ID NOs; 7, 8, 15, 16, and 29-32), about 4 for exons 3

and 14 (SEQ ID NOs; 11, 12, 19, 20), about 4.8 for exons 16, 20, 13 and 10 (SEQ ID NOs; 17, 18, 23 and 28), and about 8 for exon 9 (SEQ ID NOs; 22 and 21).

9. The method of claim 4, wherein said amplifying is by the polymerase chain reaction.

10. A method of determining the presence or absence of one or nucleic acid sequences correlated with cystic fibrosis in a nucleic acid containing sample, comprising:

contacting said sample with reagents suitable for nucleic acid amplification including one or more pairs of nucleic acid primers flanking one or more predetermined nucleic acid sequences that are correlated with cystic fibrosis,

amplifying said predetermined nucleic acid sequence(s), if present, to provide an amplified sample; and

identifying the presence or absence of said one or more predetermined sequences in said amplified sample, whereby the presence or absence of said one or more nucleic acid sequences correlated with cystic fibrosis is determined;

wherein said pairs of nucleic acid primers are selected from the group consisting of: 5'- GCGGTCCCAAAAGGGTCAGTTGTAGGAAGTCACCAAAG -3' (SEQ ID NO: 3) and 5'- GCGGTCCCAAAAGGGTCAGTCGATACAGAATATATGTGCC -3' (SEQ ID NO: 4), 5'- GCGGTCCCAAAAGGGTCAGTGAATCATTCAGTGGGTATAAGCAG -3' (SEQ ID NO: 5) and 5'- GCGGTCCCAAAAGGGTCAGTCTTCAATGCACCTCCTCCC -3' (SEQ ID NO: 6), 5'- GCGGTCCCAAAAGGGTCAGTAGATACTTCAATAGCTCAGCC -3' (SEQ ID NO: 7) and 5'- GCGGTCCCAAAAGGGTCAGTGGTACATTACCTGTATTTTGTTT -3' (SEQ ID NO: 8), 5'- GCGGTCCCAAAAGGGTCAGTGTGAATCGATGTGGTGACCA -3' (SEQ ID NO: 9) and 5'- GCGGTCCCAAAAGGGTCAGTCTGGTTTAGCATGAGGCGGT -3' (SEQ ID NO: 10), 5'- GCGGTCCCAAAAGGGTCAGTTTGGTTGTGCTGTGGCTCCT -3' (SEQ ID NO: 11) and 5'- GCGGTCCCAAAAGGGTCAGTACAATACATACAAACATAGTGG -3' (SEQ ID NO: 12), 5'- GCGGTCCCAAAAGGGTCAGTGAAAGTATTTATTTTTTCTGGAAC -3' (SEQ ID NO: 13) and 5'- GCGGTCCCAAAAGGGTCAGTGTGTGTAGAATGATGTCAGCTAT -3' (SEQ ID NO: 14), 5'- GCGGTCCCAAAAGGGTCAGTCAGATTGAGCATACTAAAAGTG -3' (SEQ ID NO: 15) and 5'- GCGGTCCCAAAAGGGTCAGTTACATGAATGACATTTACAGCA -3' (SEQ ID

NO: 16), 5'- GCGGTCCCAAAAGGGTCAGTAAGAACTGGATCAGGGAAGA -3' (SEQ ID NO: 17) and 5'- GCGGTCCCAAAAGGGTCAGTTCCTTTTGCTCACCTGTGGT -3' (SEQ ID NO: 18), 5'- GCGGTCCCAAAAGGGTCAGTGGTCCCACTTTTTATTCTTTTGC -3' (SEQ ID NO: 19) and 5'- GCGGTCCCAAAAGGGTCAGTTGGTTTCTTAGTGTTTGGAGTTG -3' (SEQ ID NO: 20), 5'- GCGGTCCCAAAAGGGTCAGTTGGATCATGGGCCATGTGC -3' (SEQ ID NO: 21) and 5'- GCGGTCCCAAAAGGGTCAGTACTACCTTGCCTGCTCCAGTGG -3' (SEQ ID NO: 22), 5'- GCGGTCCCAAAAGGGTCAGTAGGTAGCAGCTATTTTTATGG -3' (SEQ ID NO: 23) and 5'- GCGGTCCCAAAAGGGTCAGTTAAGGGAGTCTTTTGCACAA -3' (SEQ ID NO: 24), 5'- GCGGTCCCAAAAGGGTCAGTGCAATTTTGGATGACCTTC -3' (SEQ ID NO: 25) and 5'- GCGGTCCCAAAAGGGTCAGTTAGACAGGACTTCAACCCTC -3' (SEQ ID NO: 26), 5'- GCGGTCCCAAAAGGGTCAGTGGTGATTATGGGAGAACTGG -3' (SEQ ID NO: 27) and 5'- GCGGTCCCAAAAGGGTCAGTATGCTTTGATGACGCTTC -3' (SEQ ID NO: 28), 5'- GCGGTCCCAAAAGGGTCAGTTTCATTGAAAAGCCCGAC -3' (SEQ ID NO: 29) and 5'- GCGGTCCCAAAAGGGTCAGTCACCTTCTGTGTATTTTGCTG -3' (SEQ ID NO: 30), and 5'-
GCGGTCCCAAAAGGGTCAGTAAGTATTGGACAACTTGTTAGTCTC -3' (SEQ ID NO: 31) and 5'- GCGGTCCCAAAAGGGTCAGTCGCCTTTCCAGTTGTATAATTT -3' (SEQ ID NO: 32).

11. The method of claim 10, wherein said one or more pairs of nucleic acid primers is five pairs of nucleic acid primers.

12. The method of claim 10, wherein said one or more pairs of nucleic acid primers is ten pairs of nucleic acid primers.

13. The method of claim 10, wherein said one or more pairs of nucleic acid primers is fifteen pairs of nucleic acid primers.

14. The method of claim 13, wherein said primer sets are added in the following ratios determined as the mass of primers for exon 12 and 21 (SEQ ID NO: 9, 10, 13 and 14) to the mass of each other primer sets, the ratio being about 2 for exons 4 and i19 (SEQ ID NOs; 3-6), about 3.2 for exons 19, 7 and i5 (SEQ ID NOs; 7, 8, 15, 16, and 29-32), about 4 for exons 3

and 14 (SEQ ID NOs; 11, 12, 19, 20), about 4.8 for exons 16, 20, 13 and 10 (SEQ ID NOs; 17, 18, 23 and 28), and about 8 for exon 9 (SEQ ID NOs; 22 and 21).

15. The method of claim 10, wherein said step of amplifying is the polymerase chain reaction.

16. The method of claim 10, wherein said step of identifying the presence or absence of said one or more predetermined sequences is preformed using a solid phase array of nucleic acid probes complementary to said nucleic acid sequences that are correlated with cystic fibrosis.

17. A method of determining whether a subject has a genotype containing one or more nucleotide sequences correlated with cystic fibrosis, comprising:

obtaining a sample of nucleic acid from the subject;

contacting said sample with reagents suitable for nucleic acid amplification including one or more pairs of nucleic acid primers flanking one or more predetermined nucleic acid sequences that are correlated with cystic fibrosis,

amplifying said predetermined nucleic acid sequence(s), if present, to provide an amplified sample; and

identifying the presence of said one or more nucleic acid sequences correlated with cystic fibrosis nucleic, whereby the presence of one or more nucleic acid sequences correlated with cystic fibrosis in the genotype of the subject is determined;

wherein said pairs of nucleic acid primers are selected from the group consisting of: 5'- GCGGTCCCAAAAGGGTCAGTTGTAGGAAGTCACCAAAG -3' (SEQ ID NO: 3) and 5'- GCGGTCCCAAAAGGGTCAGTCGATACAGAATATATGTGCC -3' (SEQ ID NO: 4), 5'- GCGGTCCCAAAAGGGTCAGTGAATCATTCAGTGGGTATAAGCAG -3' (SEQ ID NO: 5) and 5'- GCGGTCCCAAAAGGGTCAGTCTTCAATGCACCTCCTCCC -3' (SEQ ID NO: 6), 5'- GCGGTCCCAAAAGGGTCAGTAGATACTTCAATAGCTCAGCC -3' (SEQ ID NO: 7) and 5'- GCGGTCCCAAAAGGGTCAGTGGTACATTACCTGTATTTTGTTT -3' (SEQ ID NO: 8), 5'- GCGGTCCCAAAAGGGTCAGTGTGAATCGATGTGGTGACCA -3' (SEQ ID NO: 9) and 5'- GCGGTCCCAAAAGGGTCAGTCTGGTTTAGCATGAGGCGGT -3' (SEQ ID NO: 10), 5'- GCGGTCCCAAAAGGGTCAGTTTGGTTGTGCTGTGGCTCCT -3' (SEQ ID NO: 11) and 5'- GCGGTCCCAAAAGGGTCAGTACAATACATACAAACATAGTGG -3'

(SEQ ID NO: 12), 5'- GCGGTCCCAAAAGGGTCAGTGAAAGTATTTATTTTTTCTGGAAC -3' (SEQ ID NO: 13) and 5'- GCGGTCCCAAAAGGGTCAGTGTGTGTAGAATGATGTCAGCTAT -3' (SEQ ID NO: 14), 5'- GCGGTCCCAAAAGGGTCAGTCAGATTGAGCATACTAAAAGTG -3' (SEQ ID NO: 15) and 5'- GCGGTCCCAAAAGGGTCAGTTACATGAATGACATTTACAGCA -3' (SEQ ID NO: 16), 5'- GCGGTCCCAAAAGGGTCAGTAAGAACTGGATCAGGGAAGA -3' (SEQ ID NO: 17) and 5'- GCGGTCCCAAAAGGGTCAGTTCCTTTTGCTCACCTGTGGT -3' (SEQ ID NO: 18), 5'- GCGGTCCCAAAAGGGTCAGTGGTCCCACTTTTTATTCTTTTGC -3' (SEQ ID NO: 19) and 5'- GCGGTCCCAAAAGGGTCAGTTGGTTTCTTAGTGTTTGGAGTTG -3' (SEQ ID NO: 20), 5'- GCGGTCCCAAAAGGGTCAGTTGGATCATGGGCCATGTGC -3' (SEQ ID NO: 21) and 5'- GCGGTCCCAAAAGGGTCAGTACTACCTTGCCTGCTCCAGTGG -3' (SEQ ID NO: 22), 5'- GCGGTCCCAAAAGGGTCAGTAGGTAGCAGCTATTTTTATGG -3' (SEQ ID NO: 23) and 5'- GCGGTCCCAAAAGGGTCAGTTAAGGGAGTCTTTTGCACAA -3' (SEQ ID NO: 24), 5'- GCGGTCCCAAAAGGGTCAGTGCAATTTTGGATGACCTTC -3' (SEQ ID NO: 25) and 5'- GCGGTCCCAAAAGGGTCAGTTAGACAGGACTTCAACCCTC -3' (SEQ ID NO: 26), 5'- GCGGTCCCAAAAGGGTCAGTGGTGATTATGGGAGAACTGG -3' (SEQ ID NO: 27) and 5'- GCGGTCCCAAAAGGGTCAGTATGCTTTGATGACGCTTC -3' (SEQ ID NO: 28), 5'- GCGGTCCCAAAAGGGTCAGTTTCATTGAAAAGCCCGAC -3' (SEQ ID NO: 29) and 5'- GCGGTCCCAAAAGGGTCAGTCACCTTCTGTGTATTTTGCTG -3' (SEQ ID NO: 30), and 5'- GCGGTCCCAAAAGGGTCAGTAAGTATTGGACAACTTGTTAGTCTC -3' (SEQ ID NO: 31) and 5'- GCGGTCCCAAAAGGGTCAGTCGCCTTTCCAGTTGTATAATTT -3' (SEQ ID NO: 32).

18. The method of claim 17, wherein said one or more pairs of nucleic acid primers is five pairs of nucleic acid primers.

19. The method of claim 17, wherein said one or more pairs of nucleic acid primers is ten pairs of nucleic acid primers.

20. The method of claim 17, wherein said one or more pairs of nucleic acid primers is fifteen pairs of nucleic acid primers.

21. The method of claim 20, wherein said primer sets are added in the following ratios determined as the moles of primers for exon 12 and 21 (SEQ ID NO: 9, 10, 13 and 14) to the moles of each other primer sets, the ratio being about 2 for exons 4 and i19 (SEQ ID NOs; 3-6), about 3.2 for exons 19, 7, 11 and i5 (SEQ ID NOs; 7, 8, 15, 16, and 29-32), about 4 for exons 3 and 14 (SEQ ID NOs; 11, 12, 19, 20), about 4.8 for exons 16, 20, 13 and 10 (SEQ ID NOs; 17, 18, 23 and 28), and about 8 for exon 9 (SEQ ID NOs; 22 and 21).

22. The method of claim 17, wherein said step of amplifying is the polymerase chain reaction.

23. The method of claim 17, wherein said step of identifying the presence of said one or more sequences correlated with cystic fibrosis is preformed using a solid phase array of nucleic acid probes complementary to said nucleic acid sequences correlated with cystic fibrosis.

24. A kit for amplifying sequences of the cystic fibrosis CTFR gene comprising one or more pairs of nucleic acid primers selected from the group consisting of: 5'- GCGGTCCCAAAAGGGTCAGTTGTAGGAAGTCACCAAAG -3' (SEQ ID NO: 3) and 5'- GCGGTCCCAAAAGGGTCAGTCGATACAGAATATATGTGCC -3' (SEQ ID NO: 4), 5'-GCGGTCCCAAAAGGGTCAGTGAATCATTCAGTGGGTATAAGCAG -3' (SEQ ID NO: 5) and 5'- GCGGTCCCAAAAGGGTCAGTCTTCAATGCACCTCCTCCC -3' (SEQ ID NO: 6), 5'- GCGGTCCCAAAAGGGTCAGTAGATACTTCAATAGCTCAGCC -3' (SEQ ID NO: 7) and 5'- GCGGTCCCAAAAGGGTCAGTGGTACATTACCTGTATTTTGTTT -3' (SEQ ID NO: 8), 5'- GCGGTCCCAAAAGGGTCAGTGTGAATCGATGTGGTGACCA -3' (SEQ ID NO: 9) and 5'- GCGGTCCCAAAAGGGTCAGTCTGGTTTAGCATGAGGCGGT -3' (SEQ ID NO: 10), 5'- GCGGTCCCAAAAGGGTCAGTTTGGTTGTGCTGTGGCTCCT -3' (SEQ ID NO: 11) and 5'- GCGGTCCCAAAAGGGTCAGTACAATACATACAAACATAGTGG -3' (SEQ ID NO: 12), 5'- GCGGTCCCAAAAGGGTCAGTGAAAGTATTTATTTTTTCTGGAAC -3' (SEQ ID NO: 13) and 5'-GCGGTCCCAAAAGGGTCAGTGTGTGTAGAATGATGTCAGCTAT -3' (SEQ ID NO: 14), 5'- GCGGTCCCAAAAGGGTCAGTCAGATTGAGCATACTAAAAGTG -3' (SEQ ID NO: 15) and 5'- GCGGTCCCAAAAGGGTCAGTTACATGAATGACATTTACAGCA -3' (SEQ ID NO: 16), 5'- GCGGTCCCAAAAGGGTCAGTAAGAACTGGATCAGGGAAGA -3' (SEQ ID

NO: 17) and 5'- GCGGTCCCAAAAGGGTCAGTTCCTTTTGCTCACCTGTGGT -3' (SEQ ID NO: 18), 5'- GCGGTCCCAAAAGGGTCAGTGGTCCCACTTTTTATTCTTTTGC -3' (SEQ ID NO: 19) and 5'- GCGGTCCCAAAAGGGTCAGTTGGTTTCTTAGTGTTTGGAGTTG -3' (SEQ ID NO: 20), 5'- GCGGTCCCAAAAGGGTCAGTTGGATCATGGGCCATGTGC -3' (SEQ ID NO: 21) and 5'- GCGGTCCCAAAAGGGTCAGTACTACCTTGCCTGCTCCAGTGG -3' (SEQ ID NO: 22), 5'- GCGGTCCCAAAAGGGTCAGTAGGTAGCAGCTATTTTTATGG -3' (SEQ ID NO: 23) and 5'- GCGGTCCCAAAAGGGTCAGTTAAGGGAGTCTTTTGCACAA -3' (SEQ ID NO: 24), 5'- GCGGTCCCAAAAGGGTCAGTGCAATTTTGGATGACCTTC -3' (SEQ ID NO: 25) and 5'- GCGGTCCCAAAAGGGTCAGTTAGACAGGACTTCAACCCTC -3' (SEQ ID NO: 26), 5'- GCGGTCCCAAAAGGGTCAGTGGTGATTATGGGAGAACTGG -3' (SEQ ID NO: 27) and 5'- GCGGTCCCAAAAGGGTCAGTATGCTTTGATGACGCTTC -3' (SEQ ID NO: 28), 5'- GCGGTCCCAAAAGGGTCAGTTTCATTGAAAAGCCCGAC -3' (SEQ ID NO: 29) and 5'- GCGGTCCCAAAAGGGTCAGTCACCTTCTGTGTATTTTGCTG -3' (SEQ ID NO: 30), and 5'-
GCGGTCCCAAAAGGGTCAGTAAGTATTGGACAACTTGTTAGTCTC -3' (SEQ ID NO: 31) and 5'- GCGGTCCCAAAAGGGTCAGTCGCCTTTCCAGTTGTATAATTT -3' (SEQ ID NO: 32),

in an amount sufficient to perform a polymerase chain reaction amplification of a nucleic acid sample.

25. The kit of claim 24, wherein said one or more pairs of nucleic acid primers is five pairs of nucleic acid primers.

26. The kit of claim 24, wherein said one or more pairs of nucleic acid primers is ten pairs of nucleic acid primers.

27. The kit of claim 24, wherein said one or more pairs of nucleic acid primers is fifteen pairs of nucleic acid primers.